Javascript Assignment 7

1. Input a String S, and check its length and if the length is greater than 4,

truncate the input String and output the result -

Input: Ice Output: Ice

Input:Icecream Output:Icec...

Ans:

function truncateString(inputString) {

if (inputString.length > 4) {

return inputString.slice(0, 4) + '...';

}

return inputString;

}

// Example usage:

const input1 = 'Ice';

const input2 = 'Icecream';

console.log(truncateString(input1)); // Should print "Ice"

console.log(truncateString(input2)); // Should print "Icec..."

2. Input a String S with multiple words, and remove whitespaces and

output the result -

Input: “Hii Boy” Output: “HiiBoy”

Ans:

function removeWhitespaces(inputString) {

return inputString.replace(/\s/g, '');

}

// Example usage:

const input = "Hii Boy";

const result = removeWhitespaces(input);

console.log(result); // Should print "HiiBoy"

3. Input a String S with two words, and replace first word with second word

and display the result -

Input: “Hii Boy” Output: “Boy Hii”

Ans:

function swapFirstAndSecondWords(inputString) {

const words = inputString.split(' ');

if (words.length === 2) {

const [firstWord, secondWord] = words;

const swappedString = `${secondWord} ${firstWord}`;

return swappedString;

}

return inputString;

}

// Example usage:

const input = "Hii Boy";

const result = swapFirstAndSecondWords(input);

console.log(result); // Should print "Boy Hii"

4. Input a String S with a word, and replace character “a” with “x” and

display the result -

Input: “apple” Output: “xpple”

Ans:

function replaceAWithX(inputString) {

return inputString.replace(/a/g, 'x');

}

// Example usage:

const input = "apple";

const result = replaceAWithX(input);

console.log(result); // Should print "xpple"

5. What string method can be used to convert string into array ?

Ans:

const inputString = "This is a sample string";

const delimiter = " "; // Split the string wherever there is a space

const stringArray = inputString.split(delimiter);

console.log(stringArray);

// Output: ["This", "is", "a", "sample", "string"]

6. What string method can be used to check the occurrence of a specified

text in a string?

Ans:

Using IndexOf():

const inputString = "This is a sample string";

const searchText = "sample";

const index = inputString.indexOf(searchText);

if (index !== -1) {

console.log(`"${searchText}" found at index ${index}`);

} else {

console.log(`"${searchText}" not found in the string`);

}

Using includes():

const inputString = "This is a sample string";

const searchText = "sample";

const isFound = inputString.includes(searchText);

if (isFound) {

console.log(`"${searchText}" found in the string`);

} else {

console.log(`"${searchText}" not found in the string`);

}

7. How can you break a string to a newline in Javascript ?

Ans:

const multiLineString = "This is the first line.\nThis is the second line.\nAnd this is the third line.";

console.log(multiLineString);

output:

This is the first line.

This is the second line.

And this is the third line.

8. Write a Javascript function to test whether the first character of a string

is lowercase.

Ans:

function isFirstCharacterLowerCase(inputString) {

const firstChar = inputString.charAt(0);

return firstChar === firstChar.toLowerCase();

}

// Example usage:

console.log(isFirstCharacterLowerCase("hello")); // true

console.log(isFirstCharacterLowerCase("Hello")); // false

console.log(isFirstCharacterLowerCase("123abc")); // false

9. Give a correct verdict to users input if he enters "yes", "YES","Yes" ,etc

(any combination) using string methods.

How will you handle that ?

Ans:

function checkUserInput(userInput) {

const lowercasedInput = userInput.toLowerCase();

if (lowercasedInput === "yes") {

return "User entered 'yes' - Correct verdict!";

} else {

return "User entered something other than 'yes' - Incorrect verdict!";

}

}

// Example usage:

console.log(checkUserInput("yes")); // Correct verdict!

console.log(checkUserInput("YES")); // Correct verdict!

console.log(checkUserInput("Yes")); // Correct verdict!

console.log(checkUserInput("No")); // Incorrect verdict!

console.log(checkUserInput("Maybe")); // Incorrect verdict!

10. Given a String S, achieve following tasks

a) Convert the String into upper case.

b) Convert only the first character to uppercase.

c) Convert the String into lower case.

d) Break the string into two halves and swap them.

e) Count the repeating characters.

f) Reverse the string

Ans:

const inputString = "Hello, World!";

// a) Convert the String into upper case.

const upperCaseString = inputString.toUpperCase();

console.log("a) Uppercase:", upperCaseString);

// b) Convert only the first character to uppercase.

const firstCharUpperCaseString = inputString.charAt(0).toUpperCase() + inputString.slice(1);

console.log("b) First Character Uppercase:", firstCharUpperCaseString);

// c) Convert the String into lower case.

const lowerCaseString = inputString.toLowerCase();

console.log("c) Lowercase:", lowerCaseString);

// d) Break the string into two halves and swap them.

const midpoint = Math.floor(inputString.length / 2);

const firstHalf = inputString.slice(0, midpoint);

const secondHalf = inputString.slice(midpoint);

const swappedString = secondHalf + firstHalf;

console.log("d) Swapped Halves:", swappedString);

// e) Count the repeating characters.

const charCount = {};

for (const char of inputString) {

if (charCount[char]) {

charCount[char]++;

} else {

charCount[char] = 1;

}

}

console.log("e) Character Count:", charCount);

// f) Reverse the string.

const reversedString = inputString.split('').reverse().join('');

console.log("f) Reversed:", reversedString);